MANASVI MANKAL





Man-asvi

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SUMMARY

Aspiring Data Scientist & Software Engineer passionate about developing Al-driven applications and scalable software solutions. Skilled in Machine Learning, MERN Stack, and Algorithm Optimization, with hands-on experience in API integration, full-stack development, and data analytics. Proficient in building data-driven models, enhancing system efficiency, and creating innovative solutions for complex challenges. Committed to continuous learning and staying ahead of emerging trends in AI and software engineering.

EDUCATION

School (Grade 1 - 10)

CHAITANYA BHARATHI INSTITUTE OF TECHNOLOGY Bachelor of Engineering - Artificial Intelligence and Data Science	(2022 - 2026)
GAUTAMI JUNIOR COLLEGE	(2020 - 2022)
High School (11 & 12) - MPC	
SILVER OAKS INTERNATIONAL SCHOOL HYDERABAD	(2010 - 2020)

SKILLS

Programming Languages: Python, Java, R Programming

Data Science, Machine Learning & Deep Learning: Deep Learning (CNN, RNN, Transfer Learning), Machine Learning, Data Science, Data Visualization, SQL

Frameworks & Libraries: TensorFlow, Keras, PyTorch, Scikit-learn, Pandas, NumPy, Matplotlib

Computer Science Basics: Data Structures & Algorithms(DSA), Linux Commands, Operating System(OS)

MERN Stack: MongoDB, ExpressJS, React, NodeJS

Web Development: HTML, CSS Version Control: Git & GitHub

Soft Skills: Presentation, Teamwork & Collaboration, Time Management, Adaptability, Problem Solving

PROJECTS

ASCENTIA



Self-Growth Application using MERN Stack and Al Assistant

- Developed Ascentia, a gamified self-development tool enabling users to create tasks and earn points (XP) upon completion, implemented using the MERN stack for a full-stack application experience.
- Integrated visual graphs to display user performance and Al-driven challenges for personalized task recommendations, showcasing strong expertise in full-stack development and gamification techniques.
- · Added an Al-powered chatbot leveraging Retrieval-Augmented Generation (RAG), enabling users to create tasks and retrieve task history through natural language prompts, ensuring intelligent and contextually relevant task management.

EMOTION RECOGNITION



Deep Learning Model for Real-time Facial Emotion Classification

- · Developed a robust emotion recognition system utilizing deep learning techniques to accurately classify facial expressions into various emotional categories (e.g., happy, sad, angry, neutral).
- Leveraged and fine-tuned state-of-the-art pre-trained models like ResNet and Mini Xception, demonstrating expertise in transfer learning, model adaptation, and optimizing CNN architectures for image classification tasks.
- Achieved high accuracy in identifying human emotions from facial images, showcasing strong proficiency in applying advanced deep learning concepts for real-world computer vision applications.

GESTURE RECOGNITION



Real-time Hand Gesture Classification System for Interactive Control

- Developed a dynamic gesture recognition system capable of accurately interpreting various hand movements and classifying them into predefined gestures for interactive applications.
- Implemented computer vision techniques, including image processing and feature extraction, to identify key patterns in hand gestures, demonstrating strong skills in visual data analysis.
- Showcased the application of machine learning algorithms for real-time gesture classification, enabling intuitive and touchless control interfaces.

YOUTUBE COMMENTS SENTIMENT ANALYSIS



Data Science Project

- Developed a real-time YouTube Comments Sentiment Analysis tool that extracts and classifies comments as positive or negative. Engineered using R programming, leveraging the YouTube Comments API for real-time analysis.
- · Integrated tidytext for text processing and generated visualizations to analyze audience sentiment and engagement trends effectively.

CERTIFICATION

JAVA FULL STACK CERTIFICATION FROM UDEMY	(2024)
FOUNDATION IN ARTIFICIAL INTELLIGENCE & MACHINE LEARNING CERTIFICATION	(2024)
AMCAT CERTIFICATION	(2025)
Scored 90+ percentile in all sections, demonstrating strong problem-solving and coding ability	(2025)

HACKATHONS

AI/ML HACKATHON - 2025

Developed an AI Tool to Convert Natural Language to SQL Queries, enabling non-technical users to extract information from relational databases seamlessly.

HACKTOBER 24-HOUR HACKATHON - 2024

Built an Al-powered Outfit Recommendation System that analyzed user-uploaded wardrobe images and suggested combinations using image classification.

AMAZON SUSTAINABILITY HACKATHON - SEASON 5 -2025

Proposed tech-driven solutions to enhance sustainability by minimizing packaging waste and optimizing delivery logistics. Developed a Sustainability Store concept that scores products based on material and manufacturing processes to promote eco-friendly choices.

AMAZON SUSTAINABILITY HACKATHON - SEASON 5 -2025

Proposed tech-driven solutions to enhance sustainability by minimizing packaging waste and optimizing delivery logistics. Developed a Sustainability Store concept that scores products based on material and manufacturing processes to promote eco-friendly choices.

SMART INDIA HACKATHON - 2023

Developed a web-based solution to predict student dropouts by analyzing demographic and academic data. Visualized a state-wise dropout heatmap of India categorized by reasons such as gender, economic status, and education level. Proposed actionable solutions to reduce dropout rates through targeted interventions.

SMART INDIA HACKATHON - 2024

Created an interactive ocean pollution awareness game using intuitive design to educate users on conservation. Integrated story-based decision-making features where players navigate real-life scenarios and make choices impacting the virtual marine ecosystem, enhancing engagement and environmental understanding.

ACHIEVEMENTS

Runner-Up in Project Expo for Ascentia, a gamified self-development tool built using the MERN stack. **Solved 250+ problems on LeetCode**, demonstrating strong problem-solving and data structures & algorithms proficiency.